Application No.: 10/816,824

Art Unit: 3742

Attorney Docket No. 3449-0315PUS1 Amendment filed on January 18, 2005

Page 3

Amended Claim Set

1. (Currently Amended) An apparatus <u>in a microwave oven</u> for exhausting pollutant <u>in a microwave oven generated during a cooking process</u>, the apparatus comprising:

a sensor part <u>formed located</u> at a predetermined portion of the microwave oven, for detecting fumes and/or moisture contained in polluted air generated during a <u>the cooking process</u>;

a controller for determining whether or not an amount of the fumes and/or moisture detected by the sensor part, the controller outputting a driving signal in response to the amount of the fumes and/or moisture exceeding is greater than a first predetermined reference value, the controller stopping outputting the driving signal in response to the amount of the fumes and/or moisture equal to or lower than a second predetermined reference value, the first predetermined reference value being higher than the second predetermined reference value; and

a fan driving part, operated, when the amount detected by the controller is greater than the reference value, by a the fan driving part in response to the driving signal from the controller and allowing inhaling the polluted air containing the a pollutant to be inhaled and then removed from an interior and removing the pollutant.

Application No.: 10/816,824 Attorney Docket No. 3449-0315PUS1

Art Unit: 3742 Amendment filed on January 18, 2005
Page 4

2. (Original) The apparatus according to claim 1, wherein the sensor part comprises a detecting sensor installed in an intake duct part of the microwave oven.

3. (Original) The apparatus according to claim 1, further comprising an exhaust hole formed at a predetermined portion of the microwave oven, and allowing the air discharged by the fan driving part to be exhausted to an exterior.

4. (Original) The apparatus according to claim 1, further comprising:

a discharge duct part allowing the air inhaled by the fan driving part to be discharged into the interior; and

a filter disposed in the discharge duct part, for filtering the pollutant contained in the inhaled air.

5. (Currently Amended) A method for exhausting pollutant in through a microwave oven, the method comprising the steps of:

if foods are cooked and fumes and/or moisture are generated, detecting the fumes and/or moisture at a detecting sensor of the microwave oven; and

comparing amount of the detected fumes and/or moisture with a first reference value

Application No.: 10/816,824

Art Unit: 3742

Attorney Docket No. 3449-0315PUS1 Amendment filed on January 18, 2005

Page 5

to operate driving a blower fan when the an amount of the detected

fumes and/or moisture is greater higher than the a first predetermined

reference value; and

stopping the blower fan and not to operate the blower fan when the

amount of the detected fumes and/or moisture is equal to or less lower than

the first a second predetermined reference value, the first predetermined

reference value being higher than the second predetermined reference value

and continuing to perform the detecting step.

6. (Currently Amended) The method according to claim 5, further

comprising the step of steps: maintaining an operation of the blower fan when

the amount of the fumes and/or moisture detected after the blower fan is

operated is greater than a second reference level; and

stopping the operation of the blower fan when the amount of the fumes

and/or moisture-detected after the blower fan is operated is equal to or less

than the second reference level.

7. (Original) The method according to claim 5, wherein, while the blower

fan is operated, the air containing polluted air is exhausted to an exterior.

Application No.: 10/816,824 Attorney Docket No. 3449-0315PUS1

Art Unit: 3742 Amendment filed on January 18, 2005

Page 6

8. (Original) The method according to claim 5, wherein the air inhaled by

the blower fan is filtered and is then discharged to an interior.

9. (Currently Amended) A method for exhausting pollutant in through a

microwave oven, the method comprising the steps of:

comparing an amount of fumes and/or moisture contained in the

pollutant generated during a cooking process with a first reference value;

operating driving a blower fan when the amount an amount of fumes

and/or moisture contained in the pollutant generated during a cooking process

is greater higher than the a first predetermined reference value;

purifying the pollutant; and

stopping the operation of the blower fan when the amount of fumes

and/or moisture contained in the pollutant detected after the purifying step, is

equal to or lower less than a second predetermined reference value, the first

predetermined reference value being higher than the second predetermined

reference value.

10. (Original) The method according to claim 9, wherein the purifying

step is performed by exhausting the air containing the pollutant to an exterior.

· Application No.: 10/816,824 Attorney Docket No. 3449-0315PUS1 Art Unit: 3742

Amendment filed on January 18, 2005

Page 7

11. (Original) The method according to claim 9, wherein the purifying

step is performed by purifying the pollutant through a filter and discharging

the purified air to an interior.

12. (Currently Amended) The method according to claim 9, wherein the

first predetermined_reference value is a reference value for determining an

amount of the fumes and/or moisture generated at an initial cooking stage.

13. (Currently Amended) The method according to claim 9, wherein the

second predetermined reference value is a reference value for determining a

purification degree of an interior environment when the pollutant is exhausted

out of the interior by some degree.

14. (Currently Amended) The method according to claim 9, wherein the

first predetermined reference value represents a higher pollution degree than

the second predetermined reference value.

15. (Currently Amended) An apparatus in a microwave oven for

exhausting pollutant in a microwave oven generated during a cooking process,

the apparatus comprising:

Application No.: 10/816,824

Art Unit: 3742

Attorney Docket No. 3449-0315PUS1 Amendment filed on January 18, 2005

Page 8

a detecting sensor formed located at a predetermined position of the

microwave oven, for detecting an amount of fumes and/or moisture of an air

contained in pollutant;

a blower fan, the blower fan inhaling the air when the amount of the

fumes and/or moisture is higher than a first predetermined reference value,

the blower fan stopping inhaling the air when the amount of the fumes and/or

moisture is equal to or lower than a second predetermined reference value, the

first predetermined reference value being higher than the second

predetermined reference value; operated in accordance with a control signal

from the detecting sensor; and

an exhaust hole, through which the air inhaled/discharged by the blower

fan is discharged dischargeable to an exterior through the exhaust hole;

and/or

a discharge duct part, through which the air inhaled/discharged by the

blower fan is discharged dischargeable to an interior through the discharge

duct part.

16. (Original) The apparatus according to claim 15, wherein the

microwave oven is an over-the-range type.

Application No.: 10/816,824 Art Unit: 3742

Attorney Docket No. 3449-0315PUS1 Amendment filed on January 18, 2005

Page 9

17. (Original) The apparatus according to claim 15, wherein the discharge duct part comprises a filter for filtering the pollutant.